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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,779	10/01/2003	Brian Klock	NEC 03008	9131
31688	7590	09/29/2006	EXAMINER	
TRAN & ASSOCIATES 6768 MEADOW VISTA CT. SAN JOSE, CA 95135			HARPER, LEON JONATHAN	
			ART UNIT	PAPER NUMBER
			2166	

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/677,779	<b>Applicant(s)</b> KLOCK ET AL.	
	<b>Examiner</b> Leon J. Harper	<b>Art Unit</b> 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 28-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 28-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/1/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed 7/22/2006 has been entered. Applicants affirmed the election of claims 1-25 and 28-36. Accordingly claims 1-25 and 28-36 are currently pending in this office action.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-25, 28-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004 0054662 (hereinafter Work) in view of US 6980984 (hereinafter Huff) .

As for claim 1: Work discloses: augmenting the system's production rules based on a search strategy (See paragraph 0022 note user can specify whether or not to use the dictionary or thesaurus which in turn specify different search databases or engines).

Work differs from the claimed invention in that the disclosure of dynamically determining at run-time the selection or order of said resources according to the production rules along with the augmented production rules is a little convoluted. Huff however more explicitly states dynamically determining at run-time the selection or order of said resources according to the production rules along with the augmented production rules (See column 20 lines 29-39 note that the delimiters are used to map concepts which are used in turn to select queries, attributes to be ordered based on the context of the query (See column 19 lines 28-33)). It would have been obvious to an artisan of ordinary skill in the pertinent art to have incorporated the teaching of Huff's into the system of Work's. The modification would have been obvious because many time users must cross reference multiple online sources and databases, and user feel differently about the reliability of each one. Allowing users to select different resources will lead to a more reliable search with better more concise results (See Work paragraph 0007).

As for claim 2 the rejection of claim 1 is incorporated, and further Work discloses: comprises placing additional constraints on the production rules at run-time (See paragraph 0022).

As for claim 3 the rejection of claim 1 is incorporated, and further Work discloses: comprises nullifying one or more of the production rules at run-time (See paragraph 0024 note: engines can be turned off or not searched).

As for claim 4 the rejection of claim 1 is incorporated, and further Work discloses: specifying the search strategy during run-time (See paragraph 0022 note: difference between pre-configured vs. user configured).

As for claim 5 the rejection of claim 1 is incorporated, and further Huff discloses: wherein the search strategy is specified by a user (See column 20 lines 29-39).

As for claim 6 Huff discloses: wherein the search strategy is hard-coded (See column 20 lines 46-50).

As for claim 7 the rejection of claim 1 is incorporated, and further Work discloses: executing the search strategy over a plurality of search passes over the resources (See paragraph 0029).

As for claim 8 the rejection of claim 7 is incorporated, and further Work discloses: wherein the search strategy of a search pass is modified by a prior search pass (See paragraph 0037).

As for claim 9 the rejection of claim 1 is incorporated, and further Huff discloses: wherein the search strategy includes conditional operators that are evaluated during the search (See column 20 lines 29-39).

As for claim 10 the rejection of claim 1 is incorporated, and further Work discloses: wherein one of the resource includes one of query processing resource, result processing resource and data resource (See paragraph 0022 note that search engine is a resource).

As for claim 11 the rejection of claim 1 is incorporated, and further Work discloses: wherein the dynamic determining is controlled in accordance with the search strategy and system state (See paragraph 0022 and paragraph 0028)

As for claim 12 the rejection of claim 1 is incorporated, and further Huff discloses: wherein the system state comprises a query (See column 5 lines 20-25).

As for claim 13 the rejection of claim 11 is incorporated, and further Work discloses: wherein the system state comprises one or more messages passed among the resources (See paragraphs 0029 and 0030 note list are passed from engine to engine).

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As for claim 14 the rejection of claim 7 is incorporated, and further Work discloses: modifying a query message received from one of the resources during one of said passes for use in a subsequent pass (See paragraph 0029).

As for claim 15 the rejection of claim 14 is incorporated, and further Work discloses: wherein the modifying further comprises assign deleting or changing of one or more keys in the query message (See paragraph 0022).

As for claim 16 the rejection of claim 7 is incorporated, and further Work discloses: modifying a data request received from one of the resources during one of said search passes (See paragraph 0029).

As for claim 17 the rejection of claim 16 is incorporated, and further Work discloses: wherein the modifying further comprises assign deleting or changing of one or more keys in the query message (See paragraph 0022).

As for claim 18 the rejection of claim 7 is incorporated, and further Work discloses: adding a data request directed at one of the resources over a route and altering the route during one of said search passes for use in a subsequent pass (See paragraphs 0038 and 0039 note the research engine is doing the altering).

As for claim 19 the rejection of claim 7 is incorporated, and further Work discloses: directing a query message at one of the resources over a route and altering the route during one of said search passes for use in a subsequent pass See paragraphs 0038 and 0039 note the research engine is doing the altering).

As for claim 20 the rejection of claim 7 is incorporated, and further Work discloses locally routing a message received from one of the resources during one of said search passes for use in a subsequent pass (See paragraph 0035 note: messages are being routed from the rules data store to the research engine).

As for claim 21 the rejection of claim 7 is incorporated, and further Work discloses: globally routing a message received from one of the resources during one of said search passes for use in a subsequent pass. (See paragraph 0036 note: when the rules are specifying courses of action this has to be done via message passing).

As for claim 22 the rejection of claim 7 is incorporated, and further Work discloses: answering or generating one or more control messages received from one of the resources during one of said passes for use in a subsequent pass (See paragraph 0039, note the rules specify relationships and they are used by the research engine for subsequent passes).



As for claim 23 the rejection of claim 7 is incorporated, and further Work discloses: updating a next pass condition received from one of the resources during one of said search passes for use in a subsequent pass (See paragraph 0040 updating research model).

As for claim 24 the rejection of claim 1 is incorporated, and further Work discloses: optimizing a search result given the strategy and the production rules (See 0037).

Claim 25 is a system claim corresponding to the method claim 1 and is thus rejected for the same reasons as set forth in the rejection of claim 1.

Claim 28 is a computer-implemented method claim corresponding to the method claim 1 and is thus rejected for the same reasons as set forth in the rejection of claim 1.

Claims 29-35 are computer program product claims corresponding to the method claims 1-4,7,8,11 respectively and are thus rejected for the same reasons as set forth in the rejection of claims 1-4,7,8,11.

As for claim 36 the rejection of claim 1 is incorporated and further Work discloses: wherein said using includes providing a query to said one or more resources and receiving at least one result therefrom (See paragraph 0030), wherein said ordering

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includes determining a sequence in which said resources are queried (See paragraph 0024), and wherein said manipulating includes controlling the operation of said resources (See paragraph 0026).

### ***Response to Arguments***

Applicant's arguments filed 7/22/2006 have been fully considered but they are not persuasive.

#### **Applicant argues:**

However the decision in work is hard-coded and although this system may appear to have a behavior similar to a search strategy, it is not since the rules are defined in advance. In contrast the instant invention changes the fixed behavior of the system into a strategic-based system by adding an extra input "search strategy," which can modify the default selection policy during runtime. Work simply fails to show a search system that augments its production rules and dynamically determines at runtime the selection or order of said resources according to said production rules along with the augmented production rules.

**Examiner responds:**

Examiner is not persuaded. Huff is cited to show the dynamic selection and it is the combination of the two references that render the claimed invention obvious not Huff or Work alone, therefore the focus should be on what the combination of the two references disclose. Examiner also notes Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. Interpretation of Claims-Broadest Reasonable Interpretation during patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). Based on this Huff does disclose dynamic selection during run-time. Huff teaches that during run-time one or more triggers may constrain the user's search using Boolean combinations alone or in combination with textual considerations as well (See Huff column 20 lines 39-44). This in combination with Works disclosure of resources and production rules do render claim 1 obvious for the reasons stated above. Moreover, while Huff does deal with concept mapping the goal of Huff is to help steer the user to desired material by facilitating the removal of unwanted content (See Huff column 1 lines 55-60).

**Applicant argues:**

Turning now to dependent claim 2, paragraph 0022 completely fails to show placing additional constraints on the production rules at run-time.

**Examiner responds:**

Examiner is not persuaded. Paragraph 0022 discloses additional constraints on the production rules. Paragraph 0022 discloses adding/modifying/removing terms as well as specifying search engines, and this all can be done dynamically for all the reasons disclosed above because the rejection of claim 2 incorporates the rejection of claim 1.

**Applicant argues:**

As for claim 3 applicants fail to find in paragraph 0024 the discussion on “engines can be turned off or not searched.” Additionally this does not equate to nullifying one or more of the production rules at run-time.

**Examiner responds:**

Examiner is not persuaded. Reference is made to MPEP 2144.01 - Implicit Disclosure “[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). In the instant case one of ordinary skill in the pertinent art would understand that if you can specify which search engines are to be used then some of the engines are on and some are off. Moreover, turning off any search engine that is included in the default setting is nullifying a production rule.

**Applicant argues:**

As for claim 10 Work fails to disclose the search strategy as applied to one of query processing resource, result processing resource and data resource.

**Examiner responds:**

Examiner is not persuaded. An engine is a resource and is one of query processing resource, result processing resource and data resource.

**Applicant argues:**

As for claim 11 paragraph 0022 and paragraph 0028 of work fails to disclose the search strategy and further fails to disclose dynamic determining is controlled in accordance with the search strategy and a system state.

**Examiner responds:**

Examiner is not persuaded. Examiner notes that the rejection of claim 11 incorporates the rejection of claim 1 and the dynamic determining is disclosed for all of the reasons cited in claim 1.

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**Applicant argues:**

As for claim 12, nowhere in Work does it disclose the system state comprises a query.

**Examiner responds:**

Examiner is not persuaded. Examiner has relied on Huff in rejection of claim 12.

**Applicant argues:**

As for claim 13, Work simply fails to show the system state with one or more messages passed among resources. Work paragraph 0029 simply mention that the research engine can generate and send queries based upon the initial query.

**Examiner responds:**

Examiner is not persuaded. Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. Interpretation of Claims- Broadest Reasonable Interpretation during patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). Examiner's view is that the research engine is sending a message.

**Applicant argues:**

As for claims 14-17, Work's paragraph 0029 shows that the research engine can generate and send queries based upon the initial query. However, Work fails to show the search strategy and further fails to teach the claimed "modifying a query message received from one of the resources during one of said search passes for use in a subsequent pass.

**Examiner responds:**

Examiner is not persuaded. Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. Interpretation of Claims- Broadest Reasonable Interpretation during patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). Each new query disclosed in paragraph 0029 is a new pass. Also examiner has pointed to paragraph 002.

**Applicant argues:**

Work fails to show claim 18's adding a data request directed at one of the resources over a route and altering the route during one of said search passes for use in a subsequent pass. Further work fails to disclose claim 19's directing a query message at one of the resources over a route and altering the route during one of said search passes for use in a subsequent pass.

**Examiner responds:**

Examiner is not persuaded. Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. Interpretation of Claims- Broadest Reasonable Interpretation during patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

**Applicant argues:**

Work fails to disclose the claimed answering or generating one or more control messages received from one of the resources during one of said passes for use in a subsequent pass.

**Examiner responds:**

Examiner is not persuaded. Each additional sub query is a subsequent pass.

**Applicant argues:**

Work does not show optimizing a search result given the strategy and the production rules. In facts the word "optimizing" is not used anywhere in Work.

**Examiner responds:**

Examiner is not persuaded. The purpose of both cited inventions are to optimize searching and receiving user results.



***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon J. Harper whose telephone number is 571-272-0759. The examiner can normally be reached on 7:30AM - 4:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJH  
Leon J. Harper  
September 26, 2006



MOHAMMAD ALI  
PRIMARY EXAMINER